

Operating No. 78 Automatic Train Control

Item No. 11-90029

SETUP:

First, you will need to create a special insulated section of track. This special insulated section will require three sections of track and two fiber pins.

1. Lay the sections of track down as shown at right.
2. At locations marked with an "X", replace the normal steel track pins with fiber pins.

CONNECTION:

The second step is to affix the lock-ons, connect the wires of your 78 to the proper terminals of the two lock-ons and lock out the direction feature of your train's "E-unit".

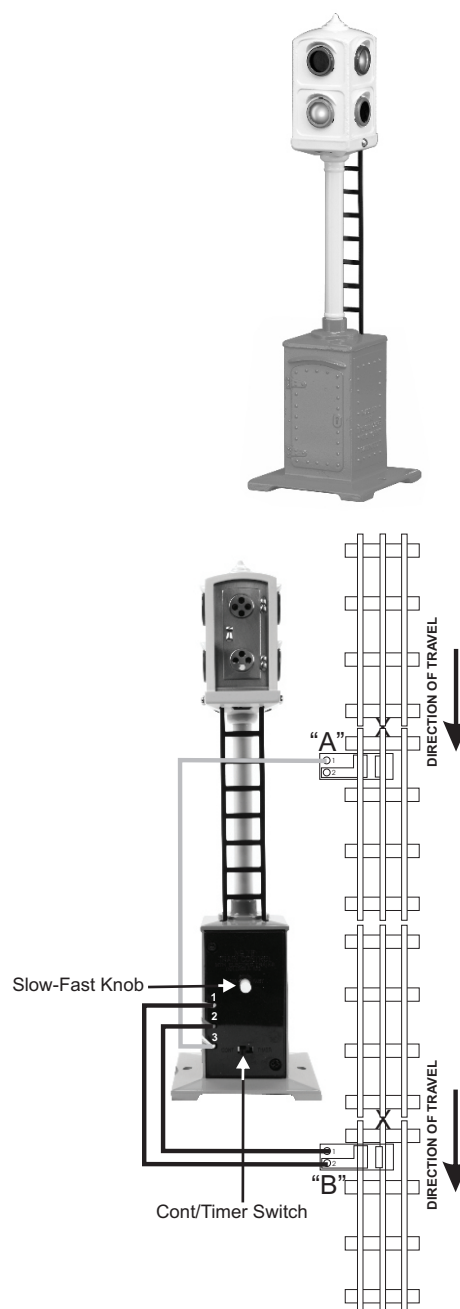
1. Affix one lock-on (marked "A") to the insulated rail section so that the outside rail terminal connects under the insulated section directly after the fiber pin as shown.
2. Affix the other lock-on (marked "B") outside the three section insulated track piece.
3. Connect wire #1 to terminal #2 of lock-on "B" and wire #2 to terminal #1 of lock-on "B".
4. Connect wire #3 to terminal #1 of lock-on "A".
5. Lock out your train's "E-unit" in the desired direction of travel.

OPERATION:

Now, you are ready to operate the 78 Train Control Block signal.

1. "TIMER" mode: This mode of operation will stop the train each time it enters the insulated section. When the train is outside the insulated section, the GREEN light will be illuminated. When the train crosses into the insulated section, the RED light will illuminate, the GREEN light will be dark and the train will stop. After a short while, the RED light will turn off, the GREEN light will turn on, and the train will move again. Use the "SLOW - FAST" knob to adjust the amount of time the train waits in the insulated section.
2. "CONT" mode: This is the continuous mode. The train will not stop in the insulated section in this mode of operation.

Note: The engine will have to be locked-out in the direction of travel for proper operation. Please consult the engine's operating manual for directional lock-out instructions.



CAUTION: Electrically Operated Product:

Recommended for Ages 14 and up. Not recommended for children under 14 years of age without adult supervision. As with all electric products, precautions should be observed during handling and use to prevent electric shock.

WARNING: When using electrical products, basic safety precautions should be observed, including the following:
 Read this manual thoroughly before using this device.

- M.T.H. recommends that all users and persons supervising use examine the hobby transformer and other electronic equipment periodically for conditions that may result in the risk of fire, electric shock, or injury to persons, such as damage to the primary cord, plug blades, housing, output jacks or other parts. In the event such conditions exist, the train set should not be used until properly repaired.
- Do not operate your layout unattended. Obstructed accessories or stalled trains may overheat, resulting in damage to your layout.
- This train set is intended for indoor use. Do not use if water is present. Serious injury or fatality may result.
- Do not operate the hobby transformer with damaged cord, plug, switches, buttons or case.

To obtain Warranty Service, please visit our website www.lionelcorporation.com